

# **Volatile Organic Compound (VOC) Exemptions**

Ralph Propper, ARB

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# **Guidance for Submitting Requests for VOC Exemptions**

- We Evaluate Case-by-Case
- Our Typical Focus:  
Consumer Products Regulations

April 2006 guidance issued:

[www.arb.ca.gov/research/reactivity/vocguide.pdf](http://www.arb.ca.gov/research/reactivity/vocguide.pdf)

# Information Needed: Health

Toxicological & Epidemiological information  
(candidate substance & breakdown products)

- Non-Cancer Toxicity (Acute & Chronic)
- Carcinogenicity & Genotoxicity
- Developmental & Reproductive Toxicity
- Bioaccumulation

# Information Needed: Expected Use & Exposure

- Substances the candidate will replace
- Amount of candidate to be used, and how
- Exposure in major California urban areas (and resulting potential health risks)
  - Average population exposure
  - Peak near-source population exposure
  - Estimate of peak indoor exposure

# Information Needed: Environmental

- Environmental Persistence
  - including impact on other media
- Atmospheric Chemistry, including impact on:
  - Ozone Formation
  - Secondary Aerosol Formation
  - Stratospheric Ozone Depletion
  - Climate Change

# Information Needed: Economic

- Benefits resulting from exemption
- Impacts from not granting an exemption
- Any existing exemptions for the candidate

# Recent VOC Exemption Requests

VOC exemption documents on our website:

[www.arb.ca.gov/research/reactivity/exemption.htm](http://www.arb.ca.gov/research/reactivity/exemption.htm)

- tert-Butyl Acetate (tBAc)
  - Case-by-case exemption recommended
- HFCs, HCFCs, HFEs
  - Exemption granted for HFE-7200 only
- Methyl Formate
  - Recommendation letter to local districts
- Dimethyl Carbonate
  - Under review

# Conclusion

We look forward to working with you on any VOC exemption requests you may have.